



# High Exhaust Emitters Project, Site Characterization, and Selection

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ZF-2-12252-12

## Performance Period

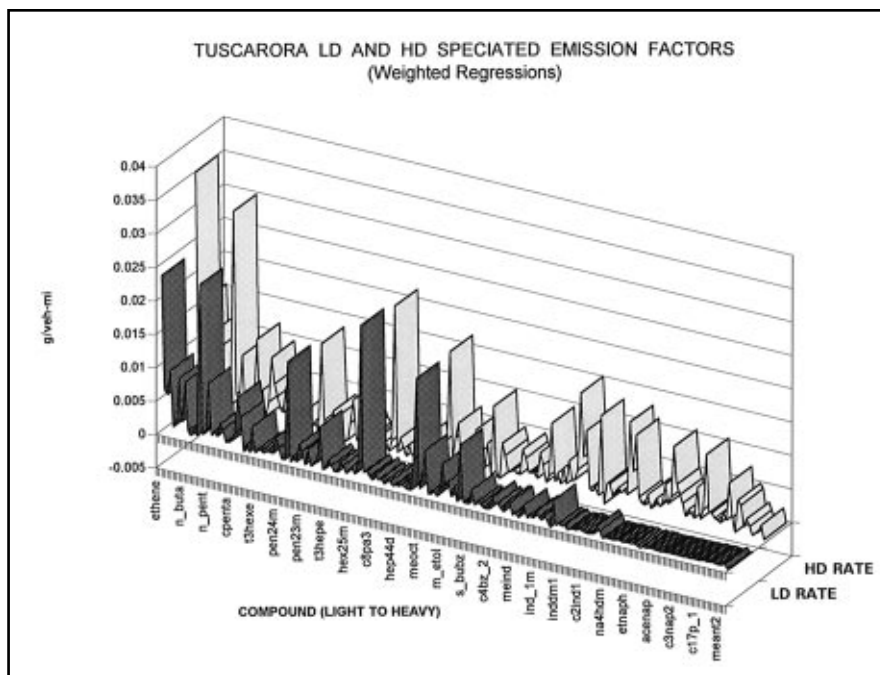
12/94–1/96

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## Objectives

The long-term objectives of the work are to quantify the mobile source contribution of the ozone-forming precursors to the urban inventory and to develop realistic, cost-effective strategies for reducing the emissions from mobile sources. Specific objectives include measuring real-world CO, speciated NMHC,  $\text{NO}_x$ , and speciated particulate emission rates from urban light-duty vehicles, comparing these results with emission factor model predictions, and laying the groundwork for a more complete experiment; for example, one including remote sensing, road-side pullover, to accurately quantify the contribution of mobile sources to real-world emissions.





## Approach

The approach involves measuring on-road emissions from vehicles in urban tunnels. The rationale for performing experiments in highway tunnels is based on the ability to accurately quantify emissions of CO, CO<sub>2</sub>, NMHC, NO<sub>x</sub>, and particulates, study traffic patterns, separate running losses from tailpipe emissions, and compare the results with emission factor models.

There are two primary facets to this study: (1) to choose appropriate urban locations; and (2) to measure on-road emission factors in six tunnels, compare these with previous experiments, and apportion the contribution of different sources to observed emissions.

## Accomplishments

Five urban locations for the six experiments have been located: the Van Nuys and Sepulveda Tunnels in Los Angeles, the Callahan Tunnel in Boston, the Lincoln Tunnel (between New York and New Jersey), and the Deck Park Tunnel in Phoenix (for winter and summer experiments). Experiments have been performed in Phoenix (winter) and the in Van Nuys Tunnel.

## Future Direction

We will complete the filed experiments in early fall and compare emissions from the urban fleet with emission factor model predictions.

## Publications

None to date.